Request to Archive
With The National Centers for Environmental Information
For Global Precipitation Climatology Project (GPCP) Monthly Analysis
Provided by University of Maryland

2016-06-24

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?
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2. Name the organization or group responsible for creating the dataset.
University of Maryland College Park

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.
The GPCP Monthly analysis is a frequently used data set of global precipitation. The GPCP data set has been cited over 1500 times in scientific journals and is part of World Climate Research Program (WCRP) and GEWEX activities, including being part of the array of data sets describing the water and energy cycles of the planet. Up to now (2016) the GPCP analysis has been produced by a consortium of individual scientists at various government and university institutions. Incorporating the GPCP Monthly production and distribution into the CDR program will formalize its production under the auspices of NOAA's commitment for continued production and distribution. The GPCP monthly product blends data from gauges (from the Global Precipitation Climatology Center), precipitation estimates from polar-orbit passive microwave satellites (SSMI, SSMIS) polar orbit IR sounders (TOVS, AIRS) and geostationary infrared satellites (GOES, MeteoSat, GMS, MTSat).

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)
From 1979
Ongoing as continuous updates to the data record

5. Edition or version number(s) of the dataset:
V2.3

6. Approximate date when the dataset was or will be released to the public:
2016-08-01

7. Who are the expected users of the archived data? How will the archived data be used?
The overall goal of GPCP is to provide the research and applications communities with high quality global analyses of precipitation at the monthly time scale for climate analysis based on a combination of satellite and ground-based data sets. The GPCP data sets have already been used in over 1500 articles in scientific journals and have become a standard in the analysis of global precipitation. The user community will continue to be research scientists studying

variations in climate, users applying precipitation information for practical applications, and general and educational users.

8. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?

The GPCP Monthly data set has undergone significant validation and evaluation by the user community. NCEI has participated in design discussions related to adaptation of the GPCP process as part of their REDR program.

9. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?

The GPCP Monthly product provides a consistent analysis of global precipitation from an integration
of various satellite data sets over land and ocean and a gauge analysis over land (Huffman et al.,
1997). Improvements to the original version have been made at irregular intervals over the past
years (Adler et al., 2003; Huffman et al., 2009) with Version 2.2 being available since 2012. This archive request is made for the new
Version 2.3, which is released in 2016. The GPCP Monthly analysis is one contribution to other global data sets at NCEI related to the global water and energy cycles, e.g., ISCCP. It is also used to constrain the PERSIANN daily precipitation product.

10. List the input datasets and ancillary information used to produce the data.

Global Precipitation Climatology Centre (GPCC) V7 Full Data Reanalysis
GPCC Monitoring Product V5
RSS Special Sensor Microwave/Imager (SSMI) Tb
RSS Special Sensor Microwave Imager/Sounder (SSMIS) Tb
Ferarro precipitation
TIROS Operational Vertical Sounder (TOVS)
Atmospheric Infrared Sounder (AIRS) V6
OLR Precipitation Index (OPI)
GOES Precipitation Index (GPI) monthly files
GPI 3 hourly files

11. List web pages and other links that provide information on the data.

http://gpcp.umd.edu

12. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.

1. Climate Algorithm Theoretical Basis Document (C-ATBD): Global Precipitation Climatology Project (GPCP) Monthly Analysis

13. Indicate the data file format(s).

1. netCDF-4

14. Are the data files compressed?

No

15. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).

gpcp_cdr_v23rB1_yYYYY_mMM.nc

16. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?

sample data are available at http://gpcp.umd.edu

17. What is the total data volume to be submitted?

<u>Historic Data: all historic data or data submitted as a completed collection.</u>

Total Data Volume:	50MB
Number of Data Files:	449

<u>Continuous Data: data volume rate for a continuous data production.</u>

Total Data Volume Rate:	110KB per Month
Data File Frequency:	1 per Month
Data Production Start:	1979-01-01

18. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

Monthly updates as requested by REDR Program

19. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location:	College Park, Maryland
System Name:	Red Hat Enterprise Linux Server release 6.7
System Owner:	University of Maryland College Park
Additional Information:	

20. What are the possible methods for submitting the data to NCEI? Select all that apply.

1. FTP PULL
2. FTP PUSH
3. SFTP PUSH

21. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.

1. Advanced web services (e.g., THREDDS Catalog Service)

22. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

23. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

Having the GPCP Monthly data set archived and available through NCEI provides the stability needed for this highly used product to continue to be used by a wide spectrum of research and application users.

24. Are the data archived at another facility or are there plans to do so? Please explain.

At University of Maryland College Park as backup.

25. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

Archival is through NOAA's REDR Program

26. Do you have a data management plan for your data?

through NOAA's REDR Program

27. Have funds been allocated to archive the data at NCEI?

through NOAA's REDR Program

28. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

NOAA's REDR Program

29. Is there a desired deadline for NCEI to archive and provide access to the data?

Archive by: 2016-08-01
Accessible by: 2016-10-01

30. Add any other pertinent information for this request.

None